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**Yancheng High-tech Zone Investment Group Co., Ltd.**

盐城高新区投资集团有限公司

**Assessment Summary**

CCX Green Finance International Limited (CCXGFI) provided a Second Party Opinion (SPO) on Yancheng High-tech Zone Investment Group Co., Ltd. Sustainable Finance Framework, assessing its alignment with the GBP2021 (with 2022 Appendix I), SBP2023, SBG2021, GLP2023 and SLP2023, relevance to the Group’s sustainable development strategy, feasibility of achieving environmental and/or social objectives, and effectiveness in managing environmental and/or social risks. CCXGFI regards the rating of Yancheng High-tech Zone Investment Group Co., Ltd. Sustainable Finance Framework as Sf-2[Good].

**Framework Type**

Sustainability Finance

**Company Location**

Jiangsu, China

**Date**

Mar 26, 2025

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**Overall Score**

**Alignment**



Green Bond Principles 2021 (with June 2022 Appendix I)  
Social Bond Principles 2023  
Sustainability Bond Guidelines 2021  
Green Loan Principles 2023  
Social Loan Principles 2023

Sf-3

Sf-1

Sf-2



**Analysts**

**Alignment**

**Ivy Zhang**

*ivyzhang@ccxgf.com.cn*

Moderate

Low

High

**Relevance**

**Quality Review**

High

Low

Moderate

**Zoe Li**

*zoeli@ccxgf.com.cn*

**Feasibility**

High

Low

Moderate

**Risk Management**

Robust

Ineffective

Adequate

* **Scope of work**

**CCXGFI has provided a SPO on Yancheng High-tech Zone Investment Group Co., Ltd. Sustainable Finance Framework (the “Sustainable Finance Framework” or “Framework”) with reference to the following criteria:**

* The alignment with the following principles (the “Principles”):
* GBP2021: Green Bond Principles 2021 (with June 2022 Appendix I) by ICMA
* SBP2023: Social Bond Principles 2023 by ICMA
* SBG2021: Sustainability Bond Guidelines 2021 by ICMA
* GLP2023: Green Loan Principles 2023 by LMA/APLMA/LSTA
* SLP2023: Social Loan Principles 2023 by LMA/APLMA/LSTA
* The relevance to the Group’s sustainable development strategy
* The feasibility of environmental and/or social objectives
* The effectiveness of environmental and/or social risk management
* **Issuer’s Profile**

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Framework Highlight

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| * For Use of Proceeds, the Eligible Green and Social Projects Categories include Green Buildings, Renewable Energy, Clean Transportation, Sustainable Water and Wastewater Management, Terrestrial and Aquatic Biodiversity, Climate Change Adaptation, Affordable Housing, and Access to Essential Services. * For Project Evaluation and Selection, the Group has set up a reasonable process and built a well-established control structure with different business departments. * For Management of Proceeds, the Group will maintain a register to keep track of the use of proceeds. The net proceeds will be reallocated to the eligible replacement projects if the designated projects cease to fulfil the criteria. Also, the unallocated proceeds will be temporarily held on cash, cash equivalents or short-term deposits. * For Reporting, the Group is committed to reporting the allocation of net proceeds at least annually until they are fully allocated or if there is a change of allocation during the outstanding period of the Sustainability Financing Transactions (“SFTs”). |
| **Relevant UN Sustainable Development Goals (SDGs):** |
| Alt Text-Alt Text-Alt Text-Alt Text-Alt Text-Alt Text-Alt Text-Alt Text-Alt Text- |

* **Alignment with the Principles**

CCXGFI is of the opinion that the Sustainable Finance Framework is credible and impactful and aligns with the four core components of the GBP2021 (with June 2022 Appendix I), SBP2023, SBG2021, GLP2023 and SLP2023.

* **Use of Proceeds**

CCXGFI’s Opinion

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| * CCXGFI has reviewed the Group’s Framework and evaluated the proposed use of proceeds. * The investments in eligible categories are anticipated to deliver significant environmental and social benefits while contributing to the achievement of several UN Sustainable Development Goals, specifically SDGs 1, 3, 4, 6, 7, 9, 11, 13 and 14. Additionally, the Group has identified a list of excluded project types based on the International Finance Corporation’s exclusion list and selected the most pertinent criteria relevant to its operational circumstances and business priorities. * CCXGFI is of the opinion that the use of proceeds is clearly defined and in good alignment with the relevant requirement of the GBP2021 (with June 2022 Appendix I), SBP2023, SBG2021, GLP2023 and SLP2023. |

The Framework sets out how the Group intends to issue SFTs. The Group will exclusively allocate an amount at least equivalent to the net proceeds of an SFT issued under this Framework to finance or refinance, in whole or in part, new or existing projects which meet the eligibility criteria of the following eligible green and social projects categories, as defined in the Project Category table.

The Group expects each issuance under this Framework to be fully allocated within 24 months from the date of issuance, and on a best-efforts basis. A maximum of 36 months look-back period would apply for refinanced projects. The proportion of financing and refinancing for the eligible green and social projects will be disclosed in the Group’s allocation report.

The following table summarizes the alignment of the Framework with the Principles’ requirements, detailing the factual findings for each requirement and confirming their alignment.

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| **Principles Requirement** | **Factual Finding** | **Alignment** |
| All designated eligible green/social projects should provide clear environmental or social benefits, which should be assessed and quantified when possible. | Eligible projects listed in the Framework have clear benefits; quantitative data will be disclosed when available. | ü |
| If proceeds are used for refinancing, it is recommended that issuers/borrowers provide an estimate of the financing vs. refinancing share and clarify which projects may be refinanced, including any look-back period. | The net use of proceeds will exclusively finance and/or refinance, in part or in full, projects under the listed categories with a look-back period of no longer than 36 months from the time of issuance, and the Group will provide an estimate of the share of financing vs. refinancing. | ü |
| Green Projects should contribute to environmental objectives recognised by GBP/GLP, and Social Projects should address or mitigate social issues and/or seek to achieve positive outcomes including for, but not limited to, a target population(s) recognised by SBP/SLP. | The eligible green projects listed in the Framework all contribute to environmental objectives in GBP/GLP; the eligible social projects listed in the Framework all contribute to addressing or mitigating a specific social issue and seek to achieve positive social outcomes. | ü |

After CCXGFI’s assessment of the Framework, the following table outlines the technical screening criteria of the eligible projects under each project category, the identified project objectives, and alignment with relevant principles. To enhance robustness, CCXGFI also assessed alignment with the Green Bond Endorsed Projects Catalogue (2021) (GBEPC) as part of the screening process. For details on the GBEPC catalogue and the Framework’s eligible projects, please refer to Appendix II.

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| **Green Project Category** | **Eligible Projects Technical Screening Criteria** | **Identified Objective** | **Alignment** |
| **Green Buildings**  Alt Text | * The Primary Energy Demand (PED), defining the energy performance of the building resulting from the construction, is at least 10 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national measures implementing Directive 2010/31/EU of the European Parliament and of the Council. The energy performance is certified using an as built Energy Performance Certificate (EPC) * For buildings larger than 5000 m², upon completion, the building resulting from the construction undergoes testing for air-tightness and thermal integrity, and any deviation in the levels of performance set at the design stage or defects in the building envelope are disclosed to investors and clients. As an alternative; where robust and traceable quality control processes are in place during the construction process this is acceptable as an alternative to thermal integrity testing * For buildings larger than 5000 m², the lifecycle Global Warming Potential (GWP) of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors and clients on demand | * Climate change mitigation | * GBP2021 * GLP2023 * GBEPC2021 – 5.2.1.2 |
| **Renewable Energy**  Alt Text | * The minimum of 85% of power generation from the facility is derived from solar energy sources * The energy storage system dedicated connection to a power production plant eligible under the low carbon power threshold of 100gCO2/kWh | * Climate change mitigation | * GBP2021 * GLP2023 * GBEPC2021 – 3.2.1.1 * GBEPC2021 – 3.2.1.2 * GBEPC2021 – 3.2.2.1 * GBEPC2021 – 3.2.2.2 * GBEPC2021 – 3.2.3.2 |
| **Clean Transportation**  Alt Text | * The transportation assets will have zero direct tailpipe CO2 emission; or * The low emission transportation assets (i.e. hybrid vehicles) will have a direct GHG emission under 50g CO2eq/p-km until 31 December 2025, and zero emission 2026 onward | * Climate change mitigation | * GBP2021 * GLP2023 * GBEPC2021 – 5.5.1.5 |
| **Sustainable Water and Wastewater Management**  Alt Text | * The waste water discharge standard will meet the national and/or regional pollutants discharge standard for municipal wastewater treatment plant (i.e. GB 18918-2002); or * The flood defenses and climate resilient projects that implement chronic and acute physical climate risks identification and vulnerability assessments, and the corresponding adaptation and resilience solutions can reduce the most water related physical climate risks | * Pollution prevention and control * Natural resource conservation | * GBP2021 * GLP2023 * GBEPC2021 – 4.2.1.6 * GBEPC2021 – 4.2.1.11 * GBEPC2021 – 5.3.1.1 * GBEPC2021 – 5.4.2.4 |
| **Terrestrial And Aquatic Biodiversity Conservation**  Alt Text | * The wetland restoration and management plan should at least contains consideration and assessment of local hydrological and pedological conditions | * Biodiversity conservation * Natural resource conservation | * GBP2021 * GLP2023 * GBEPC2021 – 1.3.2.3 * GBEPC2021 – 4.2.1.6 * GBEPC2021 – 5.4.2.5 |
| **Climate Change Adaptation**  Alt Text | * The investment and projects that implement chronic and acute physical climate risks identification and vulnerability assessments, and the corresponding adaptation and resilience solutions can reduce the most water related physical climate risks | * Climate change adaptation | * GBP2021 * GLP2023 * GBEPC2021 – 4.2.1.6 * GBEPC2021 – 4.2.1.11 |

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| **Social Project Category** | **Eligible Projects Technical Screening Criteria** | **Identified Objective** | **Alignment** |
| **Affordable Housing**  Alt Text | * Investments and expenditures in projects that provide affordable housing for the general public and vulnerable groups, including indemnificatory public rental housing, economically affordable housing, construction projects and government-supported affordable housing construction projects. These include urban renewal/old city reconstruction, resettlement houses, shanty town and houses projects to improve the living conditions of residents living in shantytowns, as well as construction of new community agglomeration projects, which are for the purpose of providing affordable housing units for resettled populations | * Provide affordable housing to meet the residential needs of low-income families | * SBP2023 * SLP2023 * SDGs 11.1 |
| **Access to Essential Services**  Alt Text | * Investment and expenditures of projects related to provide, construction and operation of the affordable and access to healthcare and education for the general public and vulnerable groups. These include nursing homes and supporting medical facilities to improve the living conditions, healthcare accessibility, additional care and support to elderly people, as well as the school facilities and educational resources to improve the accessibility and affordability of the regional teenagers population to education resources ratio, provide more teenagers with educational opportunities, in order to help address the issue of inadequate educational resources allocation and enables more teenager to receive an education | * Provide essential healthcare and education services | * SBP2023 * SLP2023 |

**In any case, this Framework will exclude the following activities from consideration for eligibility:**

* Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone-depleting substances, polychlorinated biphenyls (PCBs), wildlife or products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
* Production or trade in weapons and munitions.
* Production or trade in alcoholic beverages (excluding beer and wine).
* Production or trade in tobacco.
* Gambling, casinos, and equivalent enterprises.
* Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where any international financial company considers the radioactive source to be trivial and/or adequately shielded.
* Production or trade in unbonded asbestos fibers. This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20 per cent.
* Drift net fishing in the marine environment using nets over 2.5 kilometers in length.
* Production or activities involving harmful or exploitative forms of forced labor/harmful child labor.
* Commercial logging operations for use in primary tropical forest.
* Production or trade in wood or other forestry products other than from sustainably managed forests.
* Projects related to nuclear production.
* Projects related to fossil fuel production.
* Projects related to coal mining.
* Projects related to hydropower which installed capacity >25MW.
* **Process for Project Evaluation and Selection**

CCXGFI’s Opinion

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| * CCXGFI has reviewed the Group’s Framework and examined the governance and process for the evaluation and selection of the Eligible Projects. * The Group has built a well-established control structure with different business departments and set up a reasonable process for project evaluation and selection. * CCXGFI is of the opinion that the process is formalised and reasonably structured, transparent, relevant and aligned with this component of the GBP2021 (with June 2022 Appendix I), SBP2023, SBG2021, GLP2023 and SLP2023. |

The Sustainable Financing Working Group (the “SFWG”) of the Group consists of senior members from various departments, including Board of Director Office, Strategy and Investment Management Department, Operation and Management Department, Financing Department and Legal and Audit Department.

The SFWG meets at least every 12 months or whenever necessary. Its responsibilities include discussing, assessing, and selecting Eligible Green and Social Projects according to the framework’s criteria. The SFWG also manages updates to the framework and ensures compliance with environmental guidelines and standards.

**The Framework builds a reasonable process for project evaluation and selection, including:**

1. The SFWG will meet at least every 12 months or whenever necessary to discuss, assessment select Eligible Green and Social Projects according to the eligibility and exclusion criteria under this framework.
2. The SFWG will select the projects that comply with Environmental Protection Law of the People’s Republic of China, Environmental Impact Assessment Law of People’s Republic of China, Energy Saving Regulations of People’s Republic of China, Water Pollution Prevention and Control Action Plan, Urban Black and Odorous Water Bodies Remediation Work Guidelines, Green Bond Endorsed Projects Catalogue (2021 Edition), and other related regulations and policies in China related to the sustainable development.
3. The strategy and investment management team will submit the potential eligible projects to the SFWG for further review.
4. Then the SFWG will assess each project by its feasibility study report, Environment Impact Assessment Report etc., and the senior members from each department in the SFWG will represent to evaluate whether the project fulfil the eligibility and exclusion criteria from their professional and expertise.
5. Then the selected projects will be shortlisted and presented to the Board of Directors of the [8-1]Company for final approval. After receiving the assessment and approval from the Board of Directors, the selected projects will in the Eligible Green and Social Projects list.

* **Management of Proceeds**

CCXGFI’s Opinion

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| * CCXGFI has reviewed the Group’s Sustainable Finance Framework and the Group’s policies on management of proceeds. * The Group has clearly defined the rules for the management of proceeds. CCXGFI is of the opinion that they would make a traceable and transparent allocation process which matches the requirements of the GBP2021 (with June 2022 Appendix I), SBP2023, SBG2021, GLP2023 and SLP2023. * It is recommended that if applicable, the Group could establish a special account instead of depositing proceeds in the general funding accounts and consider engaging external agencies to oversee the management of these funds, thereby showing a stronger signal about the Group’s commitment to sustainability. |

The Group intends to allocate an amount equal to the net proceeds of the SFTs over time to finance or refinance the eligible green and social projects, with each transaction’s proceeds deposited into general funding accounts and designated towards these projects.

**The use of proceeds will be maintained in a Sustainability Finance Register, containing the following information:**

* Type of funding transaction: ISIN (if applicable), pricing date, maturity date etc.
* Eligible Green and Social Projects allocation list, information including:
* The eligible projects list, including for each eligible project, the eligible green and social project category, project description, project location, ownership percentage, total investment amount, amount allocated, settled currency, etc.
* The balance of unallocated proceeds
* The information of temporary investment for unallocated proceeds

Any balance of issuance proceeds which are not yet allocated to eligible green and social projects will be temporarily held in accordance with the Group’s liquidity guidelines in cash, cash equivalents or short-term deposits, and the Group commits not to invest such unallocated net proceeds to the projects which are subject to exclusions criteria under this Framework.

During the life of the SFTs issued, if the designated projects cease to fulfil the eligibility criteria, the net proceeds will be reallocated to replacement projects that comply with the eligibility criteria as soon as reasonably practicable.

* **Reporting**

CCXGFI’s Opinion

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| * CCXGFI has reviewed the Group’s Framework and examined the reporting mechanism. * The Group is committed to reporting the allocation of net proceeds at least annually until full allocation of the net proceeds of any SFT issued, or if there is a change of allocation during the outstanding period of the SFT and disclosing the impact of financed projects through quantitative indicators defined by ICMA’s handbook where possible. * CCXGFI is of the opinion that the report disclosure under the Framework aligns with the GBP2021 (with June 2022 Appendix I), SBP2023, SBG2021, GLP2023 and SLP2023. CCXGFI recommends the Group keep reporting until maturity if it is possible. |

The Group is committed to providing an allocation report on its eligible green projects annually with updates continuing until full allocation of the net proceeds of any SFT issued or until the SFT is no longer outstanding. The impact report associated with the Eligible Projects will be disclosed on an annual basis and subject to data availability.

The **Allocation Report** will include the following information where applicable:

* The net proceeds of each SFT outstanding;
* List of Eligible Green and Social Projects with descriptions and the amount that has been allocated and earmarked;
* The proportion of the proceeds allocated to refinancing of existing Eligible Green and Social Projects, with the clarification on which investment or project portfolios refinanced;
* The balance of unallocated proceeds held in cash, cash equivalents or short-term deposits and its temporary treatment (if any);
* The types of temporary unallocated funds placements and uses.

The **Impact Report** will cover the environmental and social benefits arising from the eligible projects where available, taking reference from the relevant indicators suggested in ICMA’s “Handbook – Harmonized Framework for Impact Reporting (2024)” and “Harmonized Framework for Impact Reporting for Social Bonds (2024)”. The methodology and assumptions used for calculation will be provided subject to the nature of Eligible Projects and the availability of information. For the detailed indicators to be disclosed in the impact report, please refer to Appendix IV.

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| **CCXGFI is of the opinion that the Framework is moderately aligned with the four core components of the Principles.** |

* **Relevance to Group’s Sustainable Development Strategy**

Yancheng National Hi-Tech Zone, where the Group is located, is a dynamic economic hub in Jiangsu Province, China, characterized by rapid growth in advanced manufacturing, renewable energy, and digital industries, with strategic significance as a critical node in the Yangtze River Delta’s industrial and innovation corridors. Specializing in infrastructure construction, industrial investment, financial services, and innovation incubation, the Group actively supports the zone’s transformation into a hub for advanced manufacturing, green energy, and cutting-edge technology, contributing significantly to regional economic vitality and sustainable development. The Group’s sustainable development strategy is deeply embedded within its operational framework, focusing on environmental impact assessments and compliance with national standards, reinforcing its commitment to sustainability. The Framework’s project categories, such as green buildings and renewable energy, demonstrate the Group’s dedication to mitigating climate change and promoting resource conservation. The alignment of these initiatives with China’s policies on sustainable development highlights the Group’s proactive approach to integrating national objectives into its strategic planning, thereby supporting both corporate and national sustainability goals.

The Group defines Green Buildings, Renewable Energy, Clean Transportation, Sustainable Water and Wastewater Management, Terrestrial and Aquatic Biodiversity, Climate Change Adaptation, Affordable Housing, Access to Essential Services as eligible green and social project categories. Furthermore, the SFTs issued under the Sustainable Finance Framework contribute to the 9 SDGs, systematically advancing the Group. In particular, the eligible projects are closely related to the Group’s major business activities, and at the same time, the Group’s current development provides overall guidance for the establishment of the Framework. Hence, the outlined Framework is expected to be consistent with the Group’s future development, indicating to long run sustainability.

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| **CCXGFI is of the opinion that the Framework is of high relevance with the overall sustainability strategy and initiatives of the Group.** |

* **Feasibility of Environmental and/or Social Objective**

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| **Green Buildings** |  |
| * In China, the building sector continues to be a predominant contributor to energy consumption and carbon emissions, accounting for an estimated 40% of the nation’s total energy usage. The rapid pace of urbanization exacerbates environmental issues, presenting a formidable challenge to China’s strategic aims of reaching carbon peaking by 2030 and achieving full carbon neutrality by 2060. Particularly during the 14th Five-Year Plan period, government directives focus heavily on decreasing energy consumption and carbon emissions per GDP within the sector. Green buildings reduce environmental impacts through energy efficiency, use of renewable materials, and improved infrastructure, aligning with national objectives of climate change mitigation and natural resource conservation. * Green Buildings initiative under this Framework are designed to diminish carbon emissions and fossil energy usage by focusing on Design, development, construction, refurbishment, redevelopment, maintenance and operations of buildings. The projects adopt national or international environmental certifications such as LEED or BREEAM, ensuring that these buildings meet high environmental standards, thus improve the utilization rate of clean energy and contributing to pollution prevention and control. The projects lead to enhanced energy efficiency, reduced operational costs, and improved indoor environmental quality, thereby fostering a harmonious coexistence with nature. * The Group strategically integrates its sustainability commitments into core business operations through these projects under this Framework. The feasibility of the projects is supported by the alignment with national standards and the backing of financial frameworks that incentivize sustainable construction practices, ensuring compliance and enhancing the potential for widespread adoption. | Alt Text |
| **Renewable Energy** |  |
| * Renewable energy plays a pivotal role in achieving sustainable development, in alignment with the nation’s strategic objectives as stipulated in the 14th Five-Year Plan for Renewable Energy Development. The blueprint sets forth a target of 50% growth in renewable energy generation, with the explicit goal of having renewables account for 33% of total electricity consumption by 2025. The Group’s Renewable Energy projects under the Framework support China’s commitment to reducing carbon emissions and transitioning towards a low-carbon economy, thus reinforcing the country’s environmental objectives. * Solar photovoltaic and wind energy systems demonstrate significant potential in reducing greenhouse gas emissions, with current projections indicating these technologies could collectively mitigate approximately 2.6 gigatons of carbon dioxide emissions annually. This represents about 22% of China’s total CO₂ emissions (11.9 gigatons) recorded in 2020, according to International Energy Agency data. By harnessing renewable sources like solar and wind, the projects aim to significantly cut greenhouse gas emissions, contributing to global climate change mitigation efforts. Economically, these projects are expected to catalyze job creation in the green energy sector and stimulate regional development, particularly in rural areas with abundant renewable resources. Furthermore, advancements in energy storage and grid integration technologies are projected to enhance energy security and reliability. * These projects’ feasibility in meeting the Group’s environmental and social goals is backed by favorable regulations and alignment with national policies. The Sustainable Financing Working Group ensures compliance with national and global standards like the UN SDGs. Resource allocation to qualified projects helps mitigate environmental risks and boost social benefits, while structured evaluation strengthens project success and overall impact. | Alt Text |
| **Clean Transportation** |  |
| * The Chinese government has been proactive in promoting clean energy and sustainable transportation as part of its comprehensive strategy to combat climate change and reduce carbon emissions. Recent policies highlight a strong emphasis on adopting new energy vehicles (NEVs) and developing supporting infrastructure, such as electric vehicle (EV) charging stations. The Clean Transportation projects under this Framework are closely aligned with China’s national priorities, particularly in public transportation systems, NEV deployment, and associated infrastructure development. Through strategic investments in these initiatives, the Framework supports national objectives for pollution control and climate change mitigation, underscoring the Group’s commitment to sustainable development. * By prioritizing zero-emission public transport and NEVs, these projects target substantial reductions in urban air pollution and greenhouse gas emissions, fostering improved air quality and healthier communities. The expansion of EV infrastructure is expected to accelerate the transition toward sustainable mobility, thereby diminishing dependence on fossil fuels. Furthermore, the enhancement of public transit systems will optimize urban connectivity, alleviate traffic congestion, and ensure equitable access to transportation services, collectively elevating urban livability standards. * These projects not only comply with domestic regulations but also align with global sustainability benchmarks, strengthening their technical validity and stakeholder credibility. A rigorous project evaluation and selection mechanism has been instituted within the Framework to prioritize initiatives with demonstrable environmental and social co-benefits. Through their focus on zero- and low-emission transportation innovations, these efforts hold significant potential to advance the Group’s dual goals of carbon neutrality and sustainable urban transformation. | Alt Text |
| **Sustainable Water and Wastewater Management** |  |
| * Sustainable water and wastewater management is critical to advancing sustainable development in China, aligning with the nation’s strategic priorities for environmental protection and resource conservation as articulated in the 14th Five-Year Plan. Sustainable Water and Wastewater Management projects within the Framework directly support China’s targets to reduce water consumption per unit of GDP by 16% and increase reclaimed water utilization to 25% by 2025. The projects’ objectives comply with national regulatory frameworks, including the Environmental Protection Law and the Water Pollution Prevention and Control Law, which mandate pollution reduction and ecological restoration. This alignment demonstrates their strategic relevance to China’s green development agenda, particularly in advancing urban water-use efficiency and implementing rigorous pollution control standards. * The projects are designed to deliver significant environmental and social benefits. By constructing and upgrading wastewater treatment facilities, the projects aim to improve water quality and reduce pollution. This initiative also supports urban environmental infrastructure, enhancing resilience against climate-related risks through the development of flood defenses and drainage systems. Moreover, the projects promote biodiversity conservation and ecosystem restoration, crucial for maintaining ecological balance. The projected outcomes include improved urban water management, reduced industrial wastewater discharge, enhanced community health and safety through cleaner water supplies. * Under the Framework, the projects are supported by a comprehensive internal control mechanism that ensures compliance with national standards and regulations. The involvement of a Sustainable Financing Working Group (SFWG) facilitates rigorous project evaluation and selection, ensuring adherence to both environmental and social criteria. Furthermore, the projects’ alignment with the UN Sustainable Development Goals (SDGs) enhance its potential to contribute positively to global sustainability efforts. Given the strategic planning, regulatory compliance, and anticipated benefits, the projects exhibit high implementation readiness and outcome certainty. | Alt Text |
| **Terrestrial and Aquatic Biodiversity Conservation** |  |
| * The Terrestrial and Aquatic Biodiversity Conservation projects are critical to supporting China’s sustainable development goals, as they closely align with national policies emphasizing ecological protection and green development. These initiatives comply with international standards such as the United Nations Sustainable Development Goals, particularly those focused on life on land and water. By addressing issues such as pollution prevention, natural resource conservation, and biodiversity conservation, the projects are designed to support national sustainability frameworks, promoting ecological balance and environmental health. By addressing key challenges including pollution prevention, sustainable natural resource management and biodiversity preservation, the projects reinforce national sustainability frameworks while advancing ecological balance and long-term environmental health. * The Terrestrial and Aquatic Biodiversity Conservation projects are expected to generate significant environmental and social benefits. These include the restoration of wetlands and river ecosystems, which can enhance biodiversity and improve water quality. Such projects have been shown to expand natural landscape areas, contributing to ecological stability and resilience against climate change impacts. The initiatives also aim to reduce pollution by treating urban black-odorous water bodies, thereby improving public health and environmental conditions. By enhancing ecosystem services, these projects help maintain ecological functions and promote sustainable resource use. * The feasibility of the projects in achieving the Group’s environmental and social goals appears promising. The rigorous project evaluation and selection process and the alignment with both national policies and international sustainability goals ensure that each project complies with national standards, enhancing the projects’ potential to deliver positive environmental and social outcomes. | Alt Text |
| **Climate Change Adaptation** |  |
| * China’s National Climate Change Adaptation Strategy 2035, issued by the Ministry of Ecology and Environment, prioritizes proactive adaptation measures to address risks posed by water scarcity and intensifying extreme weather events. The Climate Change Adaptation projects under this Framework focus on construction, refurbishment and operation of infrastructure for urban flood protection and mitigation, directly supporting China’s dual objectives of enhancing ecological resilience and fulfilling its global climate commitments. * Climate Change Adaptation projects outlined in the Framework focus on developing infrastructure to mitigate physical climate risks, such as urban flood protection structures including river works, dams, and dykes, as well as “sponge city” initiatives designed to enhance resilience against flooding and waterlogging. These projects aim to identify and assess both chronic and acute climate risks, providing solutions that significantly diminish water-related physical climate threats. The anticipated benefits of these projects include increased resilience of urban infrastructure to climate impacts, reducing the risk of flood damage in vulnerable areas. This resilience is achieved through the implementation of flood control measures and improved water management systems, which enhance the capacity to withstand heavy rainfall and flooding events. Additionally, these projects potentially decrease infrastructure repair and maintenance costs due to enhanced durability. By mitigating water-related risks, these initiatives are expected to provide long-term economic savings and improve community safety and well-being. * By adhering to stringent national and international standards, these projects effectively manage environmental impacts while advancing sustainable urban development. Moreover, the structured evaluation and selection process, governed by the Sustainable Financing Working Group (SFWG), ensures compliance with legal requirements and alignment with the UN Sustainable Development Goals. Furthermore, the Framework enhances project feasibility through comprehensive risk assessments and adaptation strategies, guaranteeing their ability to deliver both environmental and social benefits. | Alt Text |
| **Affordable Housing** |  |
| * The Chinese government has been proactive in promoting housing affordability as a key component of its urbanization strategy, focusing on providing adequate housing for low-income families and vulnerable populations. The Affordable Housing projects within the Framework align closely with China’s national policies aimed at sustainable development, contributing to enhancing urban living conditions and reducing inequality. This initiative is consistent with the broader national agenda of fostering economic growth through social equity and environmental stewardship. * The Affordable Housing projects are expected to yield substantial social benefits, primarily by improving living conditions for low-income and vulnerable groups, such as families affected by urban renewal and individuals living in inadequate housing conditions. The provision of affordable housing can lead to enhanced quality of life, safety, and independence for residents, thus addressing critical social needs. By focusing on urban renewal and the construction of community agglomerations, the projects also aim to revitalize underdeveloped areas, thereby contributing to regional economic development. * The projects adopt a structured approach to ensure housing accessibility for target populations, thereby addressing housing inadequacies and enhancing living standards. Such projects also adhere to rigorous assessment processes, ensuring compliance with environmental and social impact criteria. Thus, their strategic alignment with national policies and global goals, combined with structured financial and operational frameworks, underscores the projects’ capability to effectively meet established objectives. | Alt Text |
| **Access to Essential Services** |  |
| * China has implemented a range of policies to improve access to essential services, with a focus on healthcare and education. The government prioritizes investments aimed at enhancing living conditions for vulnerable groups to expand equitable access to essential services nationwide. By funding community-based healthcare facilities and educational infrastructure, the projects advance the government’s goals of increasing service accessibility and affordability. These efforts not only comply with national standards but also contribute to broader sustainable development objectives. * The Access to Essential Services projects develop and operate affordable healthcare and education facilities for vulnerable groups, including the elderly and underserved teenagers. They improve healthcare access for the elderly and enhances educational resources in disadvantaged areas, supporting community well-being. Investing in these services yields significant benefits: healthcare projects expand access to medical facilities, improving health outcomes, while education initiatives increase enrollment and reduce resource gaps. Together, they promote equity by reducing disparities in health and education. * The projects are supported by a robust framework that ensures compliance with both national and international sustainability standards. The internal governance mechanism employs rigorous project selection and evaluation processes to guarantee adherence to eligibility criteria. By aligning with the United Nations Sustainable Development Goals (SDGs) and national policies, the projects demonstrate high potential to achieve their objectives of enhancing social welfare and promoting sustainability. | Alt Text |

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| **CCXGFI is of the opinion that the expected environmental and/or social objectives are moderately feasible.** |

* **Effectiveness of Environmental and/or Social Risk Management**

**Process for Environmental and/or Social Risk Management**

The Group has adopted environmental and social risk management measures to ensure compliance with national laws and regulations on sustainable development governing air and gas pollution, noise emissions, hazardous substances, water and waste discharge, etc.

As the basis for investment decision-making, feasibility study report is a necessary requirement in project investment and is usually conducted by the third-party agent or professional consultant team in the evaluation and selection process. Based on the feasibility reports, the Group can identify and assess the environmental risks or social risks related to the eligible projects.

The environmental and social assessments will be conducted before the investment of each operation project to help the Group identify and manage the sustainability-related risks. It is recommended that the Group continuously monitors significant environmental and/or social risks throughout the construction and operational process of the financed projects in addition to checking feasibility study reports.

**Environmental and/or Social Risk Identification**

***Environmental Risk***

The eligible projects included in the Framework are mainly realized through the construction and development of infrastructure and renewable energy systems. Generally, the Group has identified potential negative environmental impacts during both the construction and operation process, including water pollution, solid wastes, dust and noise.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Water** | **Wastes** | **Noise** | **Air** |
| **Construction Process** | * Production wastewater * Domestic sewage | * Construction waste * Workers’ household waste | * Construction Machine | * Dust from land levelling, excavation, transportation, and the accumulation of soil |
| **Operation Process** | * Domestic sewage | * Household waste | * Machine Transportation | * Exhaust emissions * Dust from transportation |

|  |  |
| --- | --- |
|  | **Project-specific Impact** |
| **Clean Transportation** | * xxx |
| **Sustainable Water and Wastewater Management** | * xxx |
| **Terrestrial and Aquatic Biodiversity** | * xxx |
| **Climate Change Adaptation** | * xxx |

The Group has committed to controlling the environmental risks by doing environmental impact assessments and taking measures according to expert recommendations for each project.

***Social Risk***

Social risks related to the eligible projects mentioned above are expected to remain at a low level. In particular, the eligible projects would have negative impacts on neither cultures, living habits, employment nor the income of surrounding people. The eligible projects aim to improve public transportation systems, enhance water and wastewater management, and promote biodiversity conservation, contributing to better living conditions and sustainable urban development.

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| **CCXGFI is of the opinion that Group’s environmental and/or social risk management is adequate.** |

**Appendix**

**I – About CCXGFI**

CCX [13-1]Green Finance International Limited (CCXGFI) is a third-party service organization under China Chengxin International Credit Rating Co., Ltd. (CCXI) that specializes in green and sustainable finance-related businesses and focuses on business development in Hong Kong and overseas regions.

In June 2023, CCXGFI was the first to obtain the external review qualification of the Hong Kong Monetary Authority’s Green and Sustainable Finance Funding Program. The services currently provided by CCXGFI include green bond and green loan assessment and certification services, green financial services for financial institutions, comprehensive green financial development services for local governments, ESG reports, ESG ratings and data services.

**II – Associations and standards**

The following outlines the associations and standards applied in the assessment process. To enhance robustness, CCXGFI also incorporated the Green Bond Endorsed Projects Catalogue (2021) (GBEPC), listed below, as part of the screening process.

|  |  |
| --- | --- |
| **Association** | **Standard** |
| * **ICMA -** International Capital Market Association | * Green Bond Principles (GBP) 2021 (with June 2022 Appendix I) * Social Bond Principles (SBP) 2023 * Sustainability Bond Guidelines (SBG) 2021 |
| * **LMA -** Loan Market Association * **LSTA -** Loan Syndications and Trading Association * **APLMA -** Asia Pacific Loan Market Association | * Social Loan Principles (SLP) 2023 * Green Loan Principles (GLP) 2023 |
| * **PBOC -** People’s Bank of China * **NDRC -** National Development and Reform Commission * **CSRC -** China Securities Regulatory Commission | * Green Bond Endorsed Projects Catalogue (GBEPC) (2021) |

|  |  |
| --- | --- |
| **Catalogue** | **Program** |
| * **GBEPC2021 – 1.3.2.3** | * Remediation and Treatment of Urban Black and Malodorous Water |
| * **GBEPC2021 – 3.2.1.1** | * Production of Wind Generators |
| * **GBEPC2021 – 3.2.1.2** | * Production of Solar Generators |
| * **GBEPC2021 – 3.2.2.1** | * Construction and Operation of Wind Power Facilities |
| * **GBEPC2021 – 3.2.2.2** | * Construction and Operation of Solar Energy Utilization Facilities |
| * **GBEPC2021 – 3.2.3.2** | * Operation and Construction of Energy Efficient Storage Facilities |
| * **GBEPC2021 – 4.2.1.6** | * Protection and Restoration of Rivers, Lakes and Wetlands |
| * **GBEPC2021 – 4.2.1.11** | * Drought and Flood Management for Water-Related Ecosystem |
| * **GBEPC2021 – 5.2.1.2** | * Green Buildings |
| * **GBEPC2021 – 5.3.1.1** | * Construction and Operation of Facilities for Sewage Treatment, Recycling, and Sludge Treatment and Disposal |
| * **GBEPC2021 – 5.4.2.4** | * Construction, Operation and Renovation of Up-to-standard Urban Drainage Facilities |
| * **GBEPC2021 – 5.4.2.5** | * Restoration of the Natural Ecology of Urban Water Bodies |
| * **GBEPC2021 – 5.5.1.5** | * Construction and Operation of Public Transportation System in Urban and Rural Areas |
| * **SDGs 11.1** | * By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums |

**III – Methodology**

CCXGFI offers pertinent and forward-thinking environmental, social, and governance (ESG) data, performance assessments and the CCXGFI Green Bond Evaluation Methodology.

The organization establishes a comprehensive indicator system using the Analytic Hierarchy Process (AHP), which encompasses 4 first-level indicators, 9 second-level indicators, 18 third-level indicators, and 33 fourth-level indicators. A judgment matrix is constructed using this method to compare and rank each indicator based on its importance. The single ranking weight is then calculated for each indicator at every level. Subsequently, the total ranking weight is determined by multiplying the single ranking weight by the weight of the previous factor. Finally, the sustainable finance framework’s comprehensive score is obtained by scoring each indicator and multiplying it by the total ranking weight of each indicator.

Analysts employing the scoring methodology, assign an overall score to the sustainable finance Framework and, when compared with the criteria of the CCXGFI Sustainability Assessment, furnish descriptions for one of the subsequent three rating levels.

|  |  |
| --- | --- |
| **Level** | **Standard** |
| **Sf-1**  **Excellent** | * The four core components of the Framework present **high** level of alignment with the Principles * The relevance of the Framework to Group’s sustainable development strategy is **high** * The feasibility of environmental and/or social objectives is **high** * The environmental and/or social risk management is **robust** |
| **Sf-2**  **Good** | * The four core components of the Framework present **moderate** level of alignment with the Principles * The relevance of the Framework to Group’s sustainable development strategy is **moderate** * The feasibility of environmental and/or social objectives is **moderate** * The environmental and/or social risk management is **adequate** |
| **Sf-3**  **Weak** | * The four core components of the Framework present **low** level of alignment with the Principles * The relevance of the Framework to Group’s sustainable development strategy is **low** * The feasibility of environmental and/or social objectives is **low** * The environmental and/or social risk management is **ineffective** |

For more information, please visit: [*https://www.ccxgfi.com/*](https://www.ccxgfi.com/)

**IV – Summary of Eligible Categories’ Details**

* Reporting indicators of impact report

|  |  |
| --- | --- |
| **Project Category** | **Impact Indicator** |
| **Green Buildings** | * Level of certification by building * Gross building area (‘GBA’) with green building certification |
| **Renewable Energy** | * Annual renewable energy generation (GWh for electricity and GJ for other energy) * Annual GHG emission or standard coal equivalent reduced/avoided |
| **Clean Transportation** | * Number of clean vehicles deployed (e.g. electric) * Number and type of clean transportation infrastructure built * Annual GHG emission reduced/avoided (tonnes of CO2 equivalent/a) |
| **Sustainable Water And Wastewater Management** | * Annual absolute (gross) amount of wastewater treated, reused or avoided before and after the project in m3/a * Amount of rain water collected and reused in m3/a |
| **Terrestrial And Aquatic Biodiversity** | * Maintenance/safeguarding/increase of natural landscape area in m2 and in % for increase * Restored, conserved or newly developed wetland/green area in m2 |
| **Climate Change Adaptation** | * Additional water availability and/or increased water catchment in m3/year * Reduction in number of operating days lost due to floods |
| **Affordable Housing** | * Number of dwellings constructed * Number of individuals/families benefiting from subsidized housing |
| **Access To Essential Services** | * Number of people received education/training * Number of people received healthcare service |

In preparing this Second Party Opinion, CCX Green Finance International Limited (CCXGFI) has complied with applicable laws, relevant regulations, and internal rules. It has also observed internal workflows and operating standards, fulfilling its duties related to due diligence and integrity. As a result, CCXGFI considers the Opinion to be independently produced, objective, and unbiased.

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The sustainable finance Framework SPO differs from corporate credit ratings, as it does not assess a Group/Company’s financial solvency. The assessment results are independent of corporate credit ratings.

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